

### Remarks

Claims 2-6, 8-10, 21 and 23-35 are now present in the application. Claim 22 has been canceled and claims 32-35 have been added. Claim 21 is independent. Reconsideration of this application, as amended, is respectfully requested.

### Election/Restriction

Claims 25-26 and 29 stand withdrawn from further consideration by the Examiner under 37 C.F.R. § 1.142(b) as being directed to a non-elected invention. The Examiner once again indicates that the election was made without traverse in paper No. 4. Applicant respectfully submits that this election was with traverse as clearly indicated in the replay to a Restriction Requirement dated January 11, 1999.

In addition, claims 25-26 and 29 depend directly from independent claim 21 which is generic to the present invention. Since independent claim 21 is believed to define over the reference relied on by the Examiner, it is respectfully requested that the Examiner now examine claims 25-26 and 29 along with remaining claims in the application.

### Rejections Under 35 U.S.C. § 102 and 103

Claims 2-6, 8-10, 21-23, 27-28 and 30 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Knecht et al., USPN 5,345,674. Claim 24 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Knecht et al. These rejections are respectfully traversed.

At the outset, it is respectfully pointed out that claim 22 has been canceled. Accordingly, the rejection under 35 U.S.C. § 102(b) has been rendered moot with regard to this claim.

The present invention, as exemplified by independent claim 21, is directed to a heat exchanging fin, wherein a combination of elements are recited including a plurality of flares formed at respective front ends of each of the plurality of collars. Each of the plurality of flares includes a plurality of radially extended sections and a plurality of connecting sections. The plurality of radially extended sections radially extend outwardly from front ends of each of the plurality of collars. Furthermore, the plurality of connecting sections connects the adjacent radially extended sections and an outer edge of each of the plurality of connecting sections is formed into a straight line or a curved line expanded outwardly with respect to an axis of the collar. Applicant respectfully submits that the Knecht et al. reference relied on by the Examiner is insufficient to teach or suggest the present invention as required by independent claim 21.

In particular, Knecht et al. discloses a heat exchanger 10 which includes a plurality of tubes 12 extending from an upper base plate 14 to a lower base plate 15. The tubes 12 extend through a plurality of guiding sheets 13 (see Fig. 1). Referring to Fig. 7 of Knecht et al. the guiding sheets 13 correspond to the metallic plate section recited in independent claim 21 of the present invention. However, as the Examiner will note, there is no collar or flares formed on any of the guiding sheets 13. Accordingly, it appears that the Examiner is considering another element of Knecht et al. to be the heat exchanging fin of the present invention. The Examiner refers to column 3, lines 60-68 of Knecht et

al. which describes the base plate 14 having collars 19 formed thereon. Accordingly, it appears that the Examiner considers the base plate 14 to be the metallic plate section recited in independent claim 21 of the present invention. Although the base plate 14 includes collar 19 formed thereon, this collar 19 does not include any flare formed thereon (see Figs. 7 and 8 of Knecht et al.). Since the collars 19 of Knecht et al. do not include a flare, they certainly do not include a plurality of radially extended sections or a plurality of connecting sections as recited in independent claim 21 of the present invention. Accordingly, the Knecht et al. reference fails to anticipate independent claim 21 of the present invention.

To the extent that the Examiner believes Fig. 9 of Knecht et al. teaches flares formed on the collar 19 as an alternative embodiment, as the Examiner will note, Fig. 9 does not illustrate flares formed on collars 19 of the base plate 14, but merely indicates a flared portion of the tubes 12. The end portions of the tubes 12 which extend through base plate 14 have a triangular end 22 as illustrated in Fig. 10. The size of the triangular portion of the tube 12 are flared outwardly at 27 in order to form a tulip-shaped design (see column 5, lines 64-68 of Knecht et al.). Referring to Fig. 8 of Knecht et al., the flared portion 27 is clearly illustrated as being a part of the tube 12, and not a part of the collar 19 of the base plate 14. Furthermore, referring to Fig. 9 again, there are only three flares that appear in this figure. As the Examiner will note, the remaining portions which appear to be extending outwardly and not identified by a reference numeral are merely the apexes of the triangular outer edge 22 of the tube 12.

With regard to dependent claims 2-6, 8-10 and 23-30, Applicant respectfully submits that these claims are allowable due to their dependence upon allowable independent claim 21, as well as for the additional limitations recited by these claims.

With specific regard to dependent claim 24, the Examiner indicates that Knecht et al. discloses all of the claimed features of the invention with the exception of four sections. However, dependent claim 24 does not recite that there are four sections, but recites that there are "no more than four" of said radially extended sections and "no more than four" of said connecting sections. Accordingly, it is respectfully requested that the Examiner indicate in the next Office Communication, if the Examiner still believes the Knecht et al. reference teaches the present invention, which elements of Knecht et al. are considered to be the radially extended sections and the connecting sections so that Applicant can gain a full understanding of the Examiner's position. To the extent understood, the Examiner believes that Fig. 9 illustrates three flares 27. Accordingly, the Examiner appears to be modifying the Knecht et al. device to include four flares 27. As mentioned above, the flares 27 are not a part of the collars 19 of the base plate 14 and therefore Fig. 9 is insufficient to teach independent claim 21 of the present invention. Furthermore, dependent claim 24 does not recite four sections. Accordingly, whether there are four of the flares 27 or not, does not change the fact that the Knecht et al. is insufficient to anticipate independent claim 21 of the present invention and therefore is also insufficient to render obvious dependent claim 24 of the present invention.

In view of the above amendments and remarks, Applicant respectfully submits that claims 2-6, 8-10, 21 and 23-30 clearly define the present invention over the Knecht

et al. reference relied on by the Examiner. Accordingly, reconsideration and withdrawal of the rejections under 35 U.S.C. §§ 102 and 103 are respectfully requested.

**Allowable Subject Matter**

Claim 31 stands objected to as being dependent upon rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Applicant greatly appreciates the indication of allowable subject matter by the Examiner. However, as mentioned above, Applicant believes that independent claim 21 defines over the Knecht et al. reference relied on by the Examiner. Accordingly, claim 31 has not been rewritten in independent form at this time.

**Additional Claims**

Additional claims 32-35 have been added for the Examiner's consideration. Applicant respectfully submits that these claims are allowable due to their dependence upon allowable independent claim 21, as well as for the additional limitations recited by these claims.

For example, dependent claim 32 requires that the cross-section of each of the plurality of collars is circular in shape. Referring to Fig. 6 of Knecht et al., it is clear that the collars 19 have a triangular shape in cross-section. Accordingly, the Knecht et al. reference fails to anticipate dependent claim 32 for this reason as well. It should also be noted that Applicant does not believe that it would be an obvious modification of the

Knecht et al. reference to change the shape of the collars 19 to be circular in shape, since the main improvement of the Knecht et al. heat exchanger over the previous prior art was to form the apertures in the base plate 14 and the collars 19 having a triangular shape in order to increase the rigidity of the base plate 14. Please see column 1, lines 49-68 of Knecht et al. Accordingly, one having ordinary skill in the art would not be motivated to modify the shape of the collars 19 of Knecht et al.

Favorable consideration and allowance of additional claims 32-35 are respectfully requested.

### **Conclusion**

All the stated grounds of rejection have been properly traversed and/or rendered moot. Applicants therefore respectfully request that the Examiner reconsider all presently pending rejections and that they be withdrawn.

It is believed that a full and complete response has been made to the Office Action, and that as such, the Examiner is respectfully requested to send the application to Issue.

In the event there are any matters remaining in this application, the Examiner is invited to contact Paul C. Lewis, Registration No. 43,368 at (703) 205-8000 in the Washington, D.C. area.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-

2448 for any additional fees required under 37 C.F.R. §§1.16 or 1.17; particularly, extension of time fees.

Respectfully submitted,

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